

**REMARKS**

This Amendment, filed in reply to the Office Action dated July 30, 2009, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-11 are all the claims pending in the application. Claims 1, 4 and 6 are amended. Claim 11 is newly presented. No new matter has been added.

***Claim Rejections under 35 U.S.C. § 112***

**Claims 8 and 9 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.** In particular, the Examiner alleges that the Specification does not disclose the features of claims 8 and 9. *See* Office Action, at page 2. Further, the Examiner alleges that the recitation of “real-time” in claims 8 and 9 introduces new matter because the Examiner believes that a new meaning to the term “on the fly” is being introduced. Applicants respectfully disagree.

Applicants respectfully submit that claims 8 and 9 were added to clarify the recitation “on the fly”. Further, Applicants respectfully refer the Examiner to page 6, lines 1-4 of the originally filed Specification, which describes that an in-line encryptor 22 is exposed to the hardware interface 18, which allows encryption and decryption to be performed as data is written or read through the interface 18, i.e., in real-time.

Therefore, Applicants respectfully submit that claims 8 and 9 comply with the requirements of 35 U.S.C. § 112, first paragraph, and that no new matter has been added.

Accordingly, Applicants respectfully request that the Examiner withdraw the 35 U.S.C. § 112 rejection.

***Claim Rejections under 35 U.S.C. § 103***

**Claims 1-10 are rejected under 35 U.S.C. § 103(a) as being obvious over Hearn et al. (US 2005/0091522) in view of Jackson (EP 0911738 A2).** Applicants traverse this rejection because the cited art fails to disclose or suggest the claim recitations.

**Claim 1**

Claim 1 has been amended to recite the existence of a housing that contains the several components of the device, including an interface for connection to a computing device, a data storage, an encryptor located in-line between said interface and said data storage, a control system; and a memory that includes program data executable on said computing device to perform user authentication.

The Examiner relies on Figures 1 and 2 of Hearn as allegedly disclosing the interface, computing device, a data storage, control system, and memory of original claim 1. *See* Office Action, at page 3. The Examiner concedes that Hearn fails to disclose or suggest an encryptor, and relies on paragraphs [0007] and [0008] of Jackson to cure this deficiency. *See* Office Action, at page 3. Applicants respectfully disagree.

**Hearn**

Hearn describes a CPU 13, and several peripheral devices which are connected to the CPU by data bus 15. *See* Hearn, at paragraph [0097]. These peripheral devices include monitor 17, keyboard 19, and storage device 21. *See* Hearn, at paragraph [0097]. A security device 35 is

interposed inline with ATA cable 33 after CPU 13. *See Hearn, at paragraph [0100], Figure 2.*

The security device 35 comprises a CPU 37, RAM 39, flash ROM 41, and interface logic 43. *See Hearn, at paragraph [0104]. An application program is stored on flash ROM 41, which controls the system's boot process and provides authentication by means of a login ID and password before access to the storage media 21 is permitted. See Hearn, at paragraph [0108]. The security device 35 is also programmed to execute an authentication application program requires correct user authentication before allowing the computer system to proceed with its normal boot sector operation and operating system loading. See Hearn, at paragraph [0125].*

No Disclosure of a Device Housing an Interface, a Data Storage, an Encryptor, a Control System, and a Memory

As discussed above, Hearn discloses a CPU 13 connected to several peripheral devices, which include a monitor 17, keyboard 19, and storage device 21. Further, Hearn discloses a security device 35 connected to the CPU 13 via ATA cable 33. That is, the storage device 21 of Hearn is external to the CPU 13 and the security device 35. Therefore, Hearn fails to disclose “A device for protecting data, comprising: a housing; an interface supported by said housing for connection to a computing device; a data storage within said housing; an encryptor within said housing located in-line between said interface and said data storage; a control system within said housing; and a memory within said housing that includes program data executable on said computing device to perform user authentication;” as recited in claim 1.

**Jackson**

Jackson discloses a Data Encryption Device (DED) 4, which encrypts and decrypts data after the DED 4 has been enabled. *See Jackson*, at paragraph [0030]. The DED 4 is controlled by commands sent from the microprocessor 3 across an eight bit data bus and a control signal generated by the CPLD 5. *See Jackson*, at paragraph [0035]. A START command must be sent in order to write to the input buffer of the DED 4. *See Jackson*, at paragraph [0037]. Once the input buffer is full after receipt of the START command the encryption/decryption function is automatically executed. *See Jackson*, at paragraph [0037]. Once encryption and decryption are performed on that data provided from the buffer, the buffer must be refilled and another round of encryption or decryption begins. *See Jackson*, at paragraph [0037].

**No Disclosure of an Encryptor Operable to Encrypt and Decrypt on the Fly**

The Examiner alleges that because Jackson only requires enablement of the DED 4 to encrypt and decrypt data, Jackson discloses the encryptor of original claim 1. *See Office Action*, at page 9. Applicants respectfully disagree.

Jackson requires that the DED 4 be enabled and then a command must be received by the DED 4 from the microprocessor 3 before encryption or decryption can begin. *See Jackson*, at paragraphs [0030], [0037]. Jackson further requires that the buffer of the DED 4 be full before encryption and decryption begins. *See Jackson*, at paragraph [0037]. Therefore, Jackson fails to disclose or suggest “said encryptor is operable to encrypt on the fly data received from said interface and to forward said data once encrypted to said data storage and to decrypt on the fly

data received from said data storage and to forward said data once decrypted to said interface" as recited in claim 1.

For at least these reasons, Applicants respectfully submit that claim 1 is patentable over the cited art.

**Claim 4**

Claim 4 recites:

A device for protecting data, comprising:

|      a housing;  
|      a first interface supported by said housing for connection to a computing device,  
|      a second interface supported by said housing for connection to a data storage;  
|      an encryptor disposed within said housing and located in-line between said first  
|      interface and said second interface;  
|      a control system disposed within said housing; and  
|      a memory disposed within said housing that includes program data  
|      executable on said computing device to perform user authentication;  
|      wherein said control system is configured to expose said memory to said  
|      first interface to facilitate user authentication and at least until user authentication  
|      and to expose said encryptor to said first interface only upon successful user  
|      authentication, and  
|      said encryptor is operable to encrypt on the fly data received from said  
|      first interface and to forward said data once encrypted to said second interface and  
|      to decrypt on the fly data received from said second interface and to forward said  
|      data once decrypted to said first interface.

The Examiner alleges that Figures 1 and 2 of Hearn disclose the first interface, second interface, control system, and memory of original claim 4. *See* Office Action, at page 5. The Examiner concedes that Hearn fails to disclose or suggest an encryptor, and relies on paragraphs [0007] and [0008] of Jackson to cure this deficiency. *See* Office Action, at page 5. Applicants respectfully disagree.

No Disclosure of a Device Housing an Interface, a Data Storage, a Control System, and a Memory

The Examiner alleges that the interface logical 43 and ATA cable 33 of Hearn discloses the second interface of original claim 4. *See* Office Action, at page 5. Applicants respectfully disagree.

As discussed above, Hearn discloses a CPU 13 connected to several peripheral devices, which include a monitor 17, keyboard 19, and storage device 21. Further, Hearn discloses a security device 35 connected to the CPU 13 via ATA cable 33. The security device 35 contains interface logic 43, which is connected to ATA cable 33. *See* Hearn, at paragraph [0106]. ATA cable 33, which is external to the security device, is connected to storage media 21. *See* Hearn, at paragraph [0106]. That is, Hearn discloses that interface logic 43 is connected to ATA cable 33 and not storage media 21. Therefore, Hearn fails to disclose “A device for protecting data, comprising: a housing, comprising: a first interface for connection to a computing device, a second interface for connection to a data storage; an encryptor located in-line between said first interface and said second interface; a control system; and a memory that includes program data executable on said computing device to perform user authentication” as recited in claim 1.

No Disclosure of an Encryptor Operable to Encrypt and Decrypt on the Fly

For the reasons stated above with respect to claim 1, Jackson fails to disclose or suggest “said encryptor is operable to encrypt on the fly data received from said first interface and to forward said data once encrypted to said second interface and to decrypt on the fly data received

from said second interface and to forward said data once decrypted to said first interface” as recited in claim 4.

For at least these reasons, Applicants respectfully submit that claim 4 is patentable over the cited art.

**Claim 6**

To the extent that claim 6 recites similar subject matter to that of claims 1 and 4, Applicants respectfully submit that claim 6 is patentable over the cited art.

**Claims 2-3, 5, and 7-10**

Due to their dependency on claims 1 and 4, Applicants respectfully submit that claims 2-3, 5, and 7-10 are patentable over the cited art.

Accordingly, Applicants respectfully request that the Examiner withdraw the 35 U.S.C. § 103(a) rejection

***New Claims***

Applicants respectfully submit that new claim 11 is patentable over the cited art due to their recited subject matter and dependency on claim 4.

***Conclusion***

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.114(c)  
U.S. Application No.: 10/593,302

Attorney Docket No.: Q97187

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

*/Alan J. Kasper/*

---

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

Alan J. Kasper  
Registration No. 25,426

WASHINGTON OFFICE  
23373  
CUSTOMER NUMBER

Date: January 29, 2010